

Appl. No. 09/931,193  
Resp. Dated Mar. 15, 2004  
Reply to Office Action of Jan. 13, 2004

Amendments to the Claims:

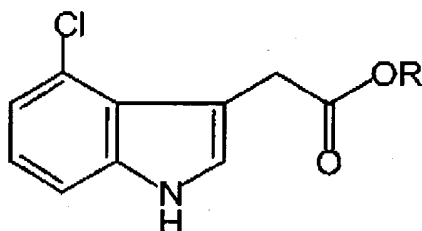
This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

Claims 1-4 (Canceled)

Claim 5. (currently amended) A root-inducing system comprising:

a solution comprising water and a root inducing compound of formula I



wherein R is selected from the group consisting of hydrogen, allyl, methyl, ethyl, 1-propyl, 2-propyl, 1-butyl, isobutyl, (R)2-butyl, (S)2-butyl, tert-butyl and 1-pentyl;

a rootless cutting having at least one leaf;

wherein the root inducing compound of formula I is in a concentration sufficient to induce the generation of

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roots from the rootless cutting when the solution is applied to the ~~leaves of a plant~~ at least one leaf of the rootless cutting;

a sprayer ~~containing the solution with directions to~~ apply the solution to ~~plant leaves to form root growth~~ the rootless cutting.

Claim 6. (previously presented) The root-inducing system of claim 5 wherein the compound has a concentration of  $10^{-7}$  to  $10^{-2}$  M.

Claim 7. (previously presented) The root-inducing system of claim 5 further comprising:

an alcohol.

Claim 8. (previously presented) The root-inducing system of claim 5 further comprising:

a polyoxyethylenealkyl phenyl ether.

Claim 9. (previously presented) The root-inducing system of claim 5 further comprising:

an organic solvent.

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Claim 10. (previously presented) The root-inducing system of claim 9 wherein the organic solvent is xylene.

Claim 11. (previously presented) The root-inducing system of claim 5 further comprising:

a beneficial agricultural chemical, wherein the beneficial agricultural chemical is selected from the group consisting of fertilizers, spreading agents and plant growth regulators.

Claim 12. (canceled)

Claim 13. (previously presented) The root-inducing system of claim 5 further comprising:

a nonyl phenyl ether.

Claim 14. (canceled)

Claim 15. (previously presented) The root-inducing system of claim 5 further comprising:

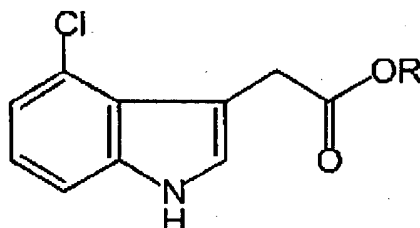
an automated sprinkling system wherein said sprayer is permanently affixed to said automated sprinkling system.

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Claim 16. (currently amended) A ~~concentrated~~ root-inducing  
~~solution for plants through application to leaves~~  
combination comprising:

a solution selected from the group consisting of  
water, alcohols and organics;

a root inducing compound of formula I



wherein R is selected from the group consisting of  
hydrogen, allyl, methyl, ethyl, 1-propyl, 2-propyl, 1-  
butyl, isobutyl, (R)2-butyl, (S)2-butyl, tert-butyl and 1-  
pentyl;

wherein the solution is mixed with the compound until  
a liquid ~~is formed~~;

~~a container that directs the user to dilute the~~  
~~contents in water to a~~ having a concentration of  $10^{-7}$  to  $10^{-2}$   
M of the compound is formed; and,

a rootless cutting having at least one leaf with a  
surface, wherein the liquid is ~~[[apply]]~~ applied to the

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surface of ~~[[leaves]]~~ the at least one leaf to induce root growth in the rootless cutting.

Claim 17. (currently amended) A method to promoting root growth on plants comprising:

providing a solvent;

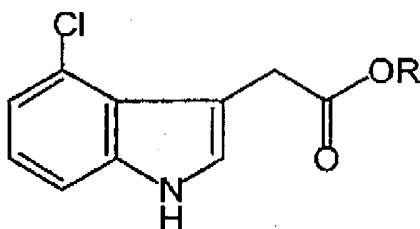
providing a root inducing compound, wherein the root inducing compound is capable of generating roots in a rootless cutting,

mixing a root inducing compound with the solvent to form a liquid;

applying the liquid to a plant leaf of the rootless cutting to induce root growth.

Claim 18. (previously presented) The method promoting root growth on plants of claim 17 further comprising:

providing a root inducing compound of formula I



wherein R is selected from the group consisting of hydrogen, allyl, methyl, ethyl, 1-propyl, 2-propyl, 1-

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butyl, isobutyl, (R)2-butyl, (S)2-butyl, tert-butyl and 1-pentyl;

forming a concentration of  $10^{-7}$  to  $10^{-2}$  M of the root inducing compound of formula I.

Claim 19. (canceled)

Claim 20. (previously presented) The method promoting root growth on plants of claim 17 further comprising:

adding beneficial agricultural chemical, wherein the beneficial agricultural chemical is selected from the group consisting of fertilizers, spreading agents and plant growth regulators.

Claim 21. (previously presented) The method promoting root growth on plants of claim 17 further comprising:

adding sodium dodecylbenzenesulfonate.

Claim 22. (previously presented) The method promoting root growth on plants of claim 17 further comprising:

adding nonyl phenyl ether.

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Claim 23. (previously presented) The method promoting root growth on plants of claim 17 further comprising:

placing the liquid in a sprayer capable of containing the solution.

Claim 24. (previously presented) The method promoting root growth on plants of claim 17 further comprising:

selecting a stem without roots having at least one leaf;

positioning the stem into a soil plug.